TABLE 10—Continued

REVERSING VALVES AND CHIMNEYS IN PRACTICE

Nominal Furnace Capacity Tons	Valve Area				Chimney		
			SqFt per Ton			Area: *SqFt	
	Gas, SqFt	Air, SqFt	Gas	Air	Height, Ft	Bore, SqFt	Per Ton
75-1	9 42	13.00	0.126	0.173			
75-A	9.42	12 56	0 126	0 167			
75-3	8 70	12 56	0 116	0 167			
75-D	7 10	10 50	0 095	0 140			
75-2					165	20 36	0 271
80-1						15.80	0.198
100-3						19 60	0.196
100-H	10.00	10.00	0.100	0.100	180	28.25	0.285
100-E	8.75	8.75	0.088	0.088	180	50.00	0.50
100-4	9.42	15.90	0.094	0.159	160	28.25	0
100-D	8 70	12 60	0 087	0 126			0.283
150-1					150	23.70	0.15 8
200-4	7.00	12.56	0.035	0.063	180	38.50	0.385

Some of these valves are so heavy as to require electric motors, or some other form of power, for their operation. In these cases the control is located on a pulpit at a central location on the charging floor, in the rear of the furnace. Smaller and lighter valves are operated by cables or levers led into the pulpit. Heavy valves have considerable inertia, and for this reason cannot be operated as rapidly, even by power, as the smaller valves with lighter moving parts.

Furnaces fired by natural gas, oil, coke-oven gas or tar require reversing valves for the air only, the fuel being reversed by shutting off the jet at one end of the furnace and turning on the jet at the opposite end. Some of these furnaces are supplied with one checker chamber at each end, while others are so constructed,